

t7\_finsub\_1

(TMF9zTees6DT387sVJRXUrp5TWWaFZyBnhM)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v4\_finsub\_1 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k5\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. k5\_xboole\_0 X0 X0 = k1\_xboole\_0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1\_xboole\_0 X2) \wedge (v4\_finsub\_1 X2)) \Rightarrow (((m1\_subset\_1 X0 X2) \wedge (m1\_subset\_1 X1 X2)) \Rightarrow (m1\_subset\_1 (k5\_xboole\_0 X0 X1) X2)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\forall X0. \exists X1. m1\_subset\_1 X1 X0 \quad (4)$$

**Theorem 1**  $\forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v4\_finsub\_1 X0)) \Rightarrow (k1\_xboole\_0 \in X0)$ .